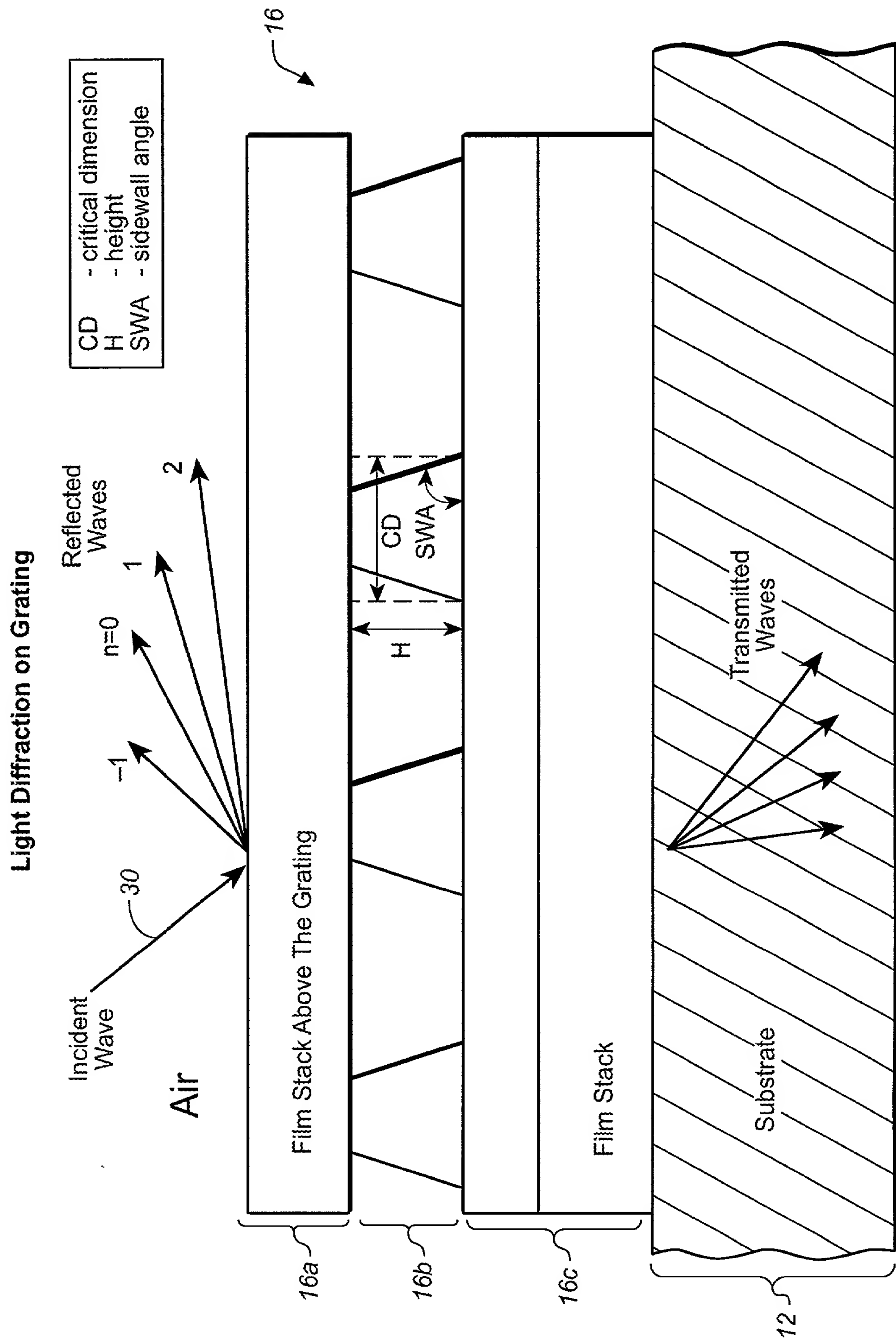


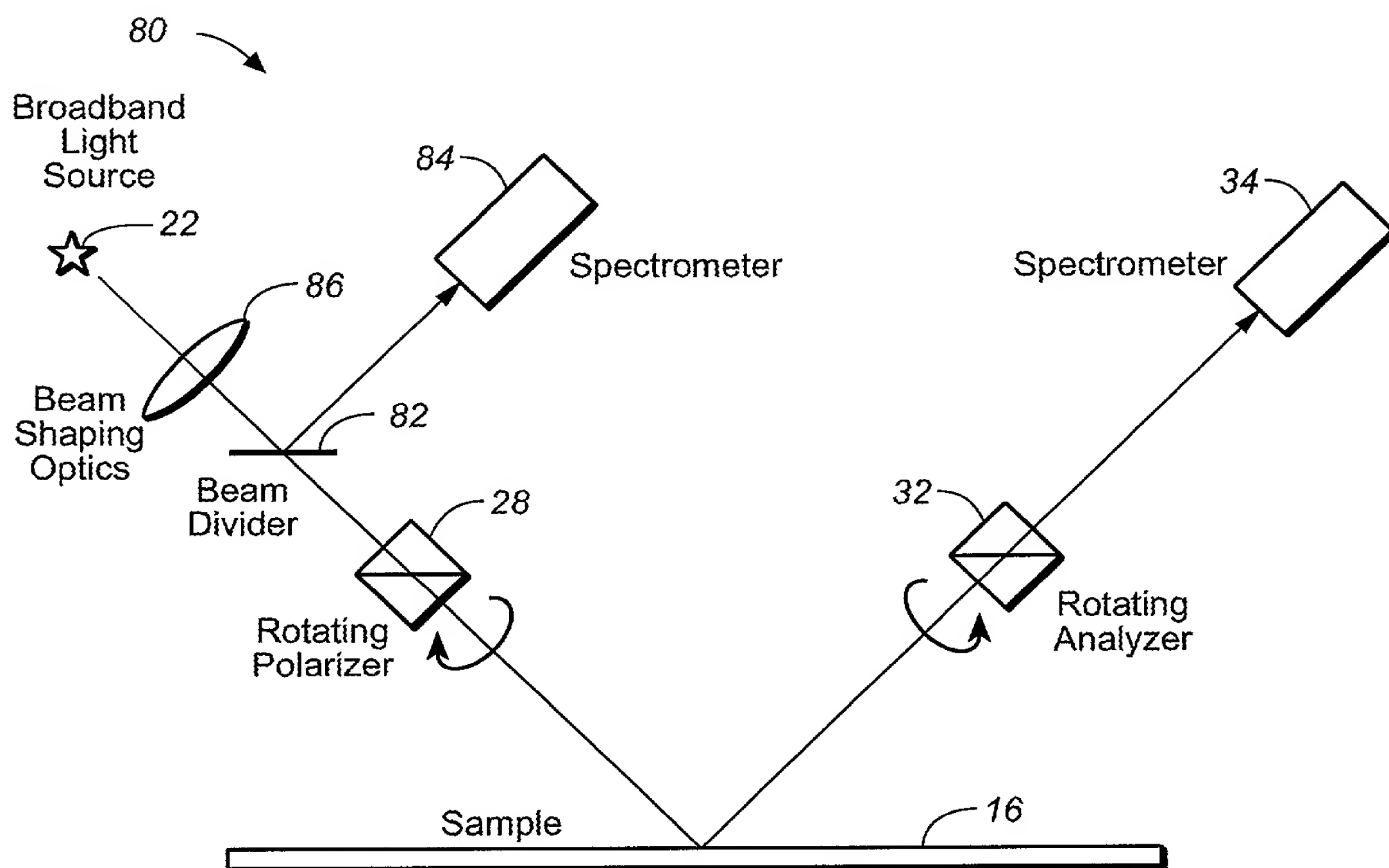
FIG. 1A



**FIG. 1B**

3 / 11

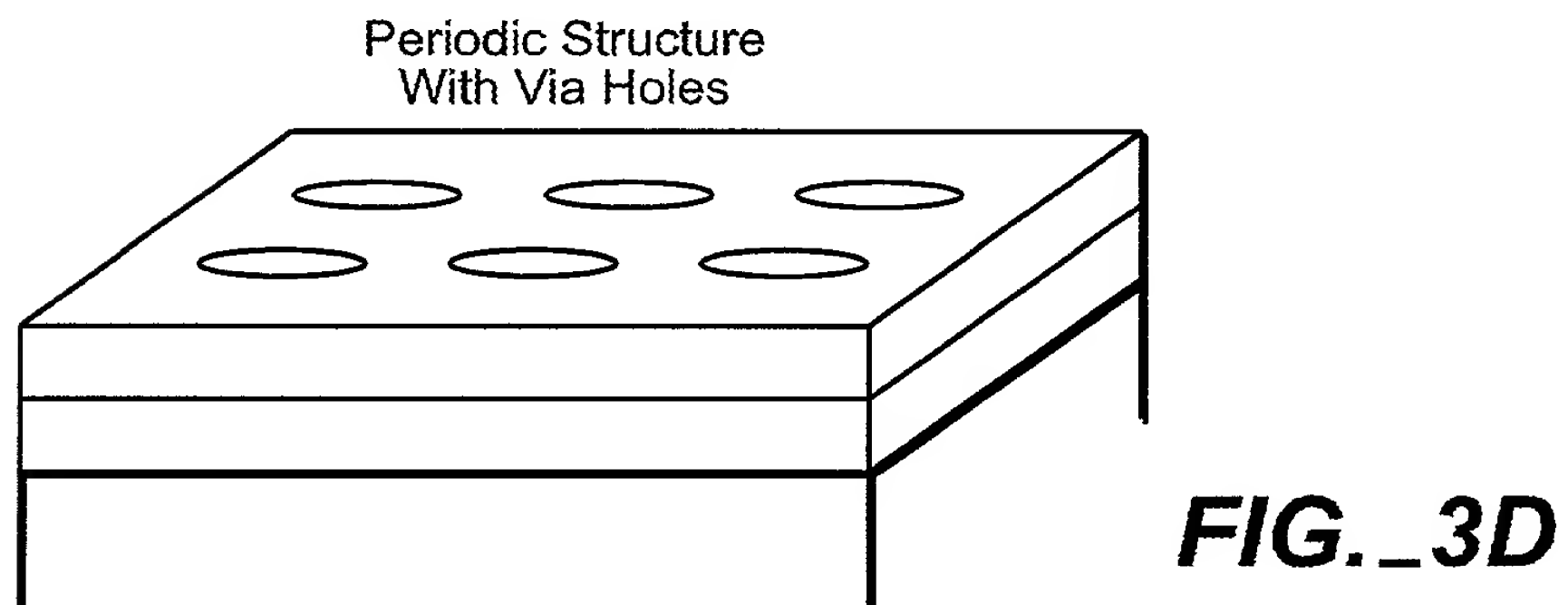
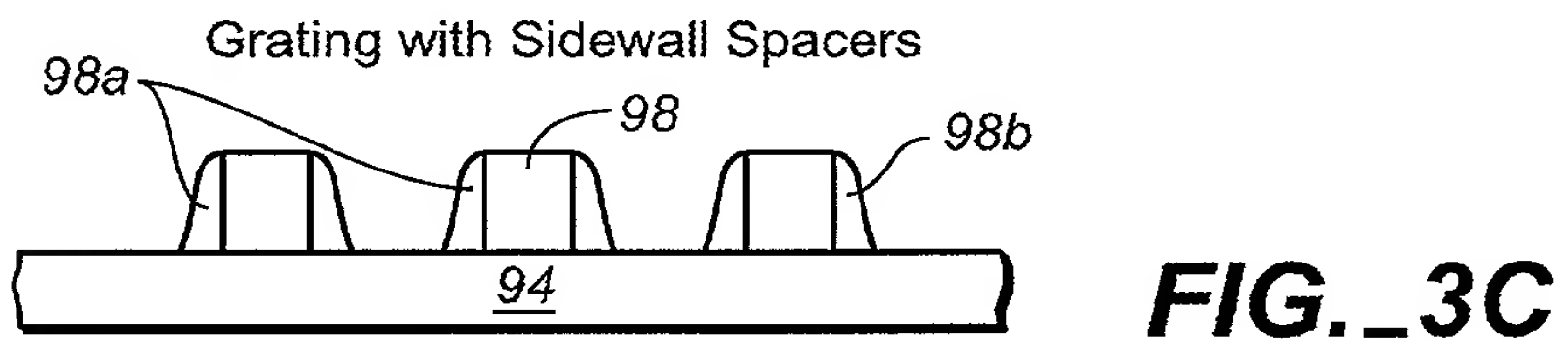
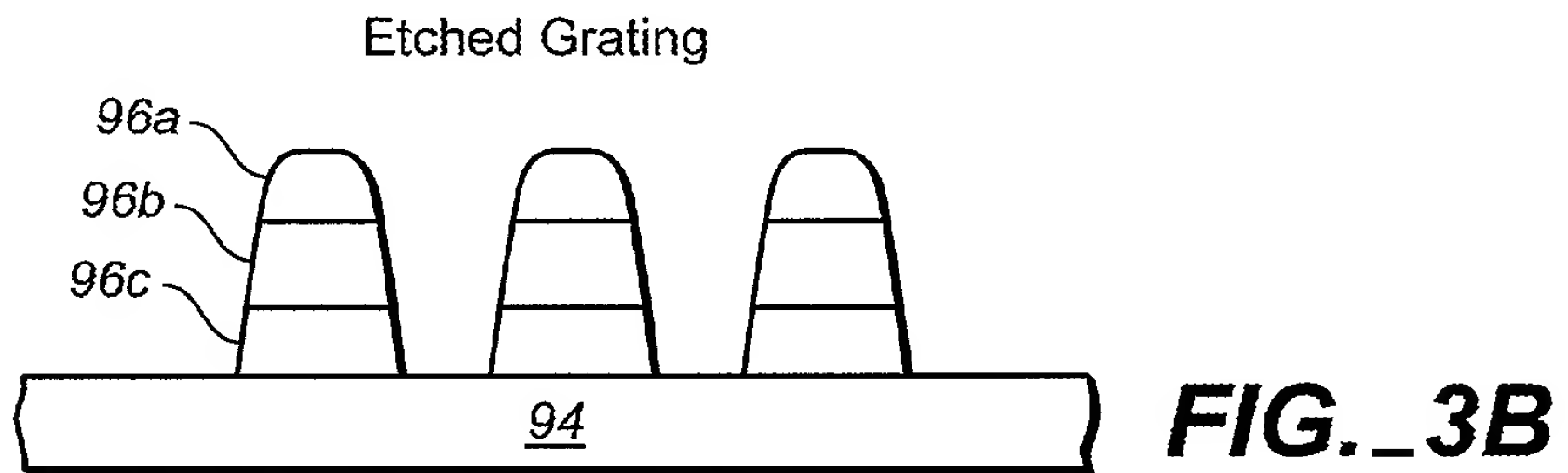
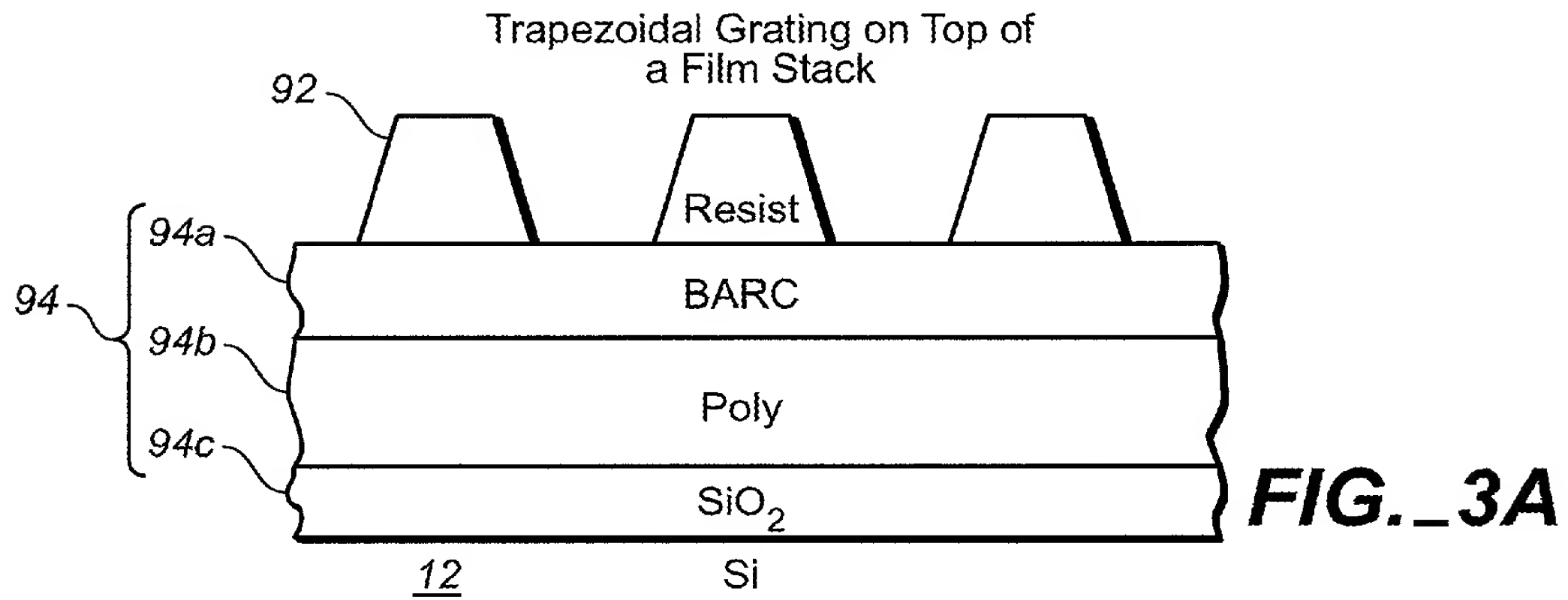
# Ellipsometer or Reflectometer With Rotating Polarizer and Analyzer



**FIG. 2**

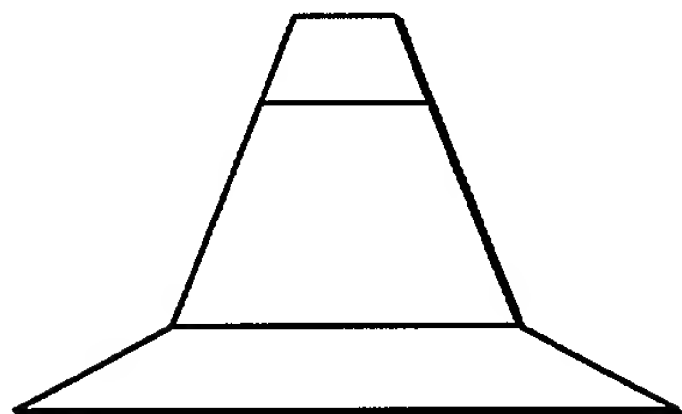
FIG. 2

4 / 11



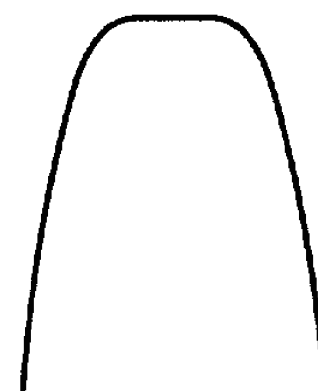
5 / 11

Single-material,  
Multi-Trapezoid Profile



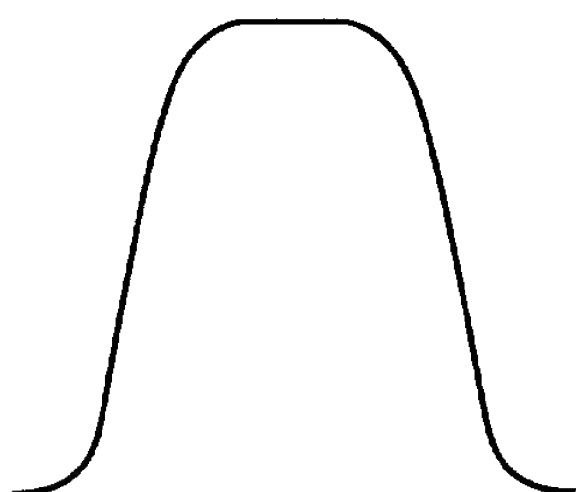
**FIG.\_4A**

Single-material,  
Quartic Profile



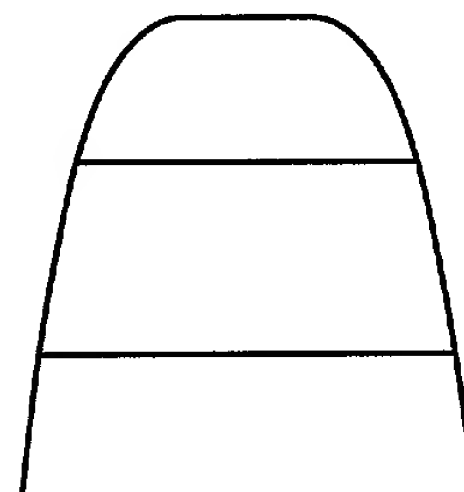
**FIG.\_4B**

Single-material Quartic Profile  
with a Bottom Rounding



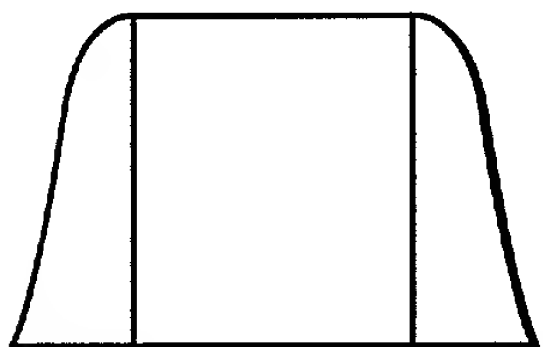
**FIG.\_4C**

Multi-material Etched Profile  
Base on the Quartic Model



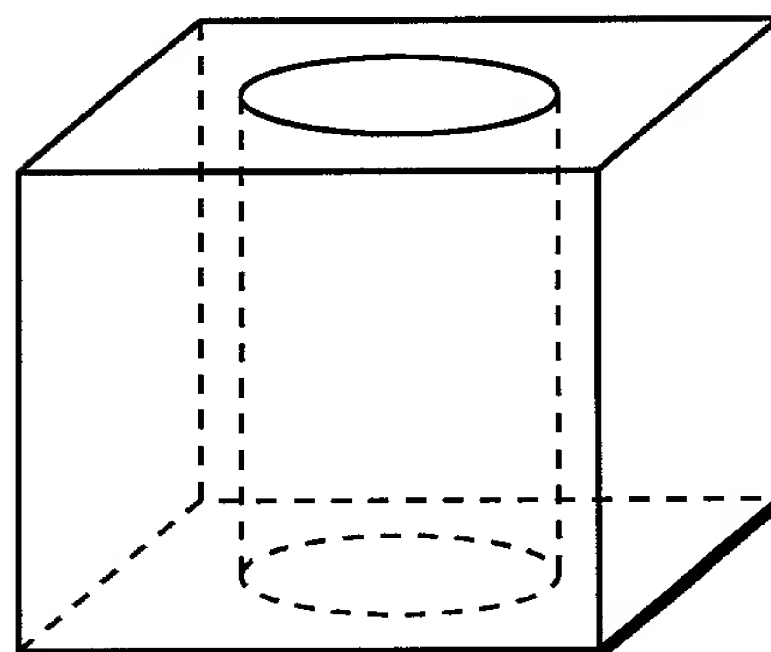
**FIG.\_4D**

Two-material Profile  
with Sidewall Spacers



**FIG.\_4E**

3-dimensional Via Hole Profile  
— a Hole in a Uniform Layer

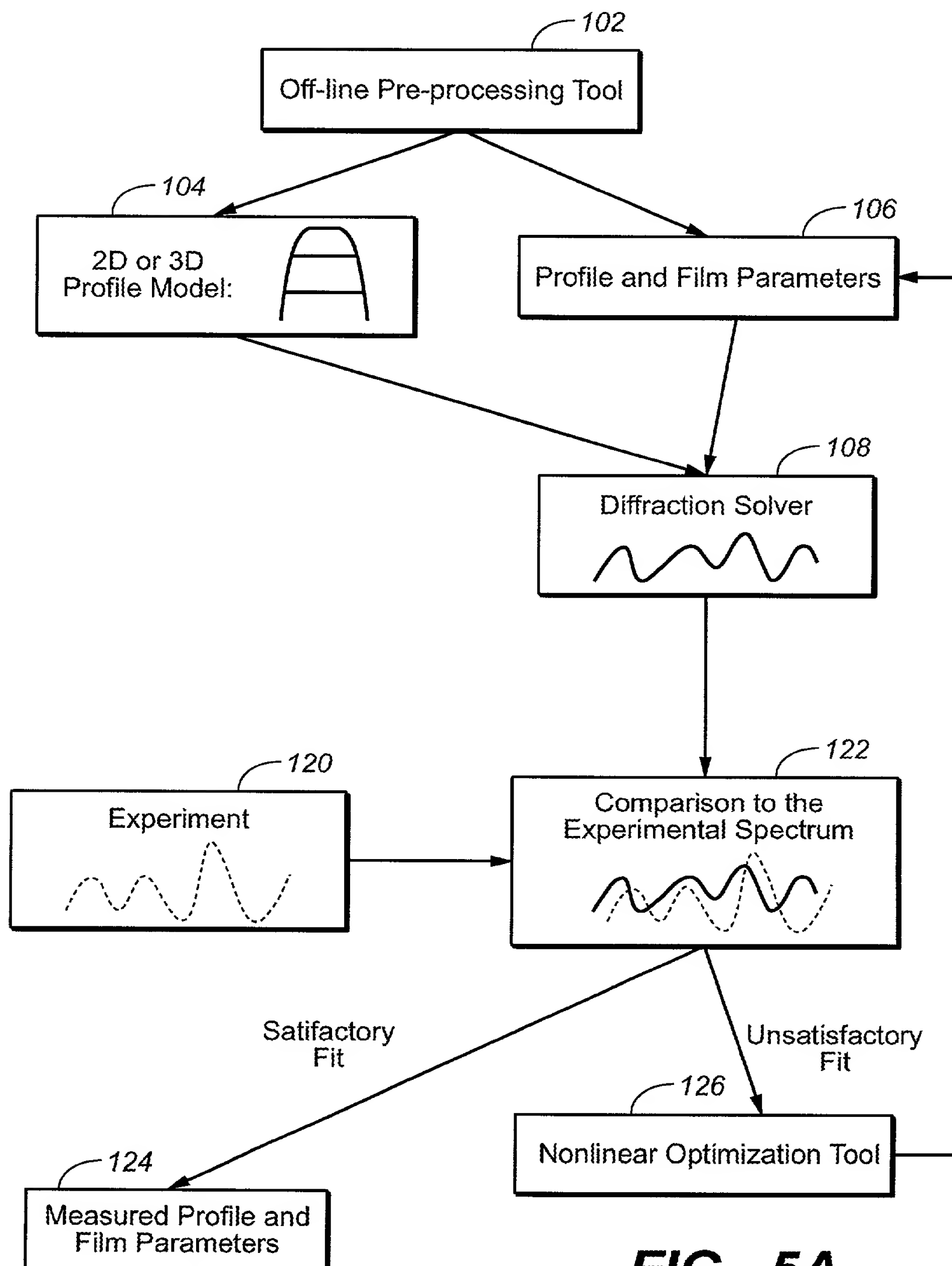


**FIG.\_4F**

100E80"E99T4Z60

6 / 11

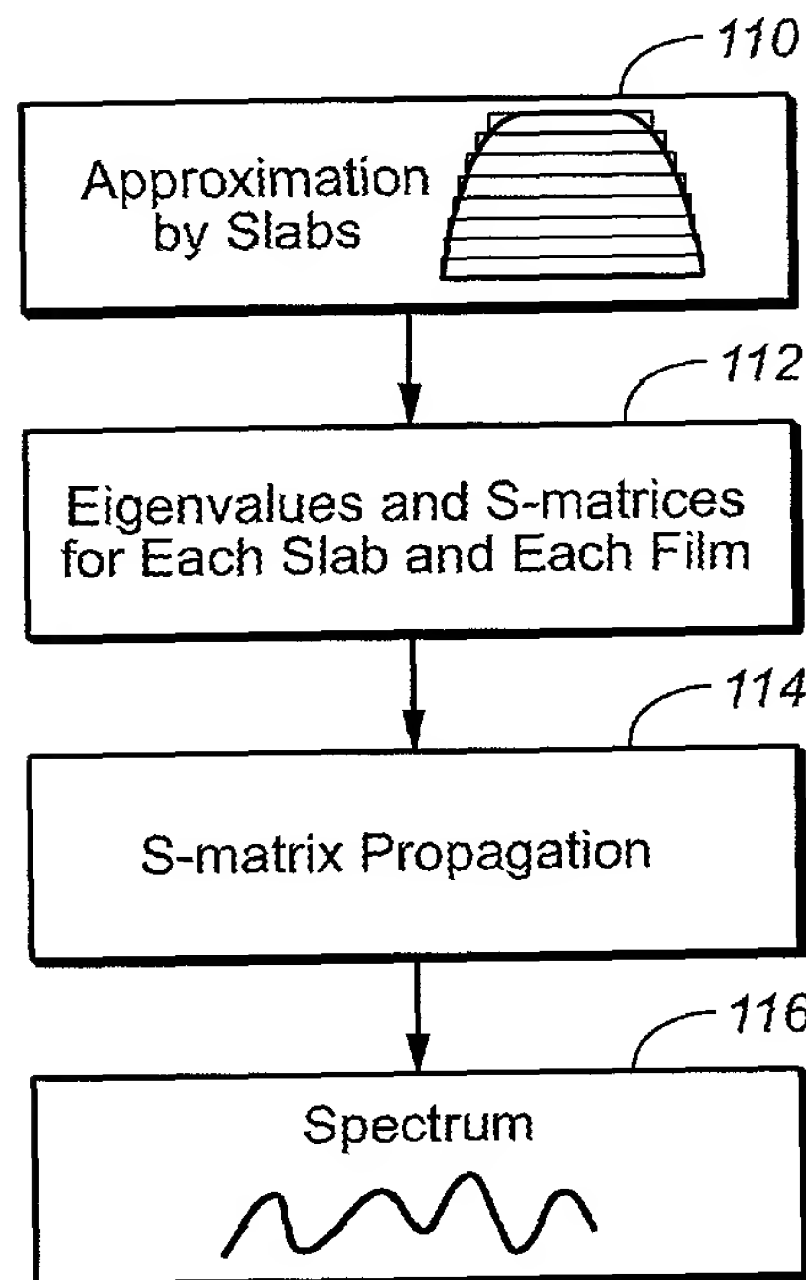
# Flowchart of Profile and Film Measurement



**FIG. 5A**

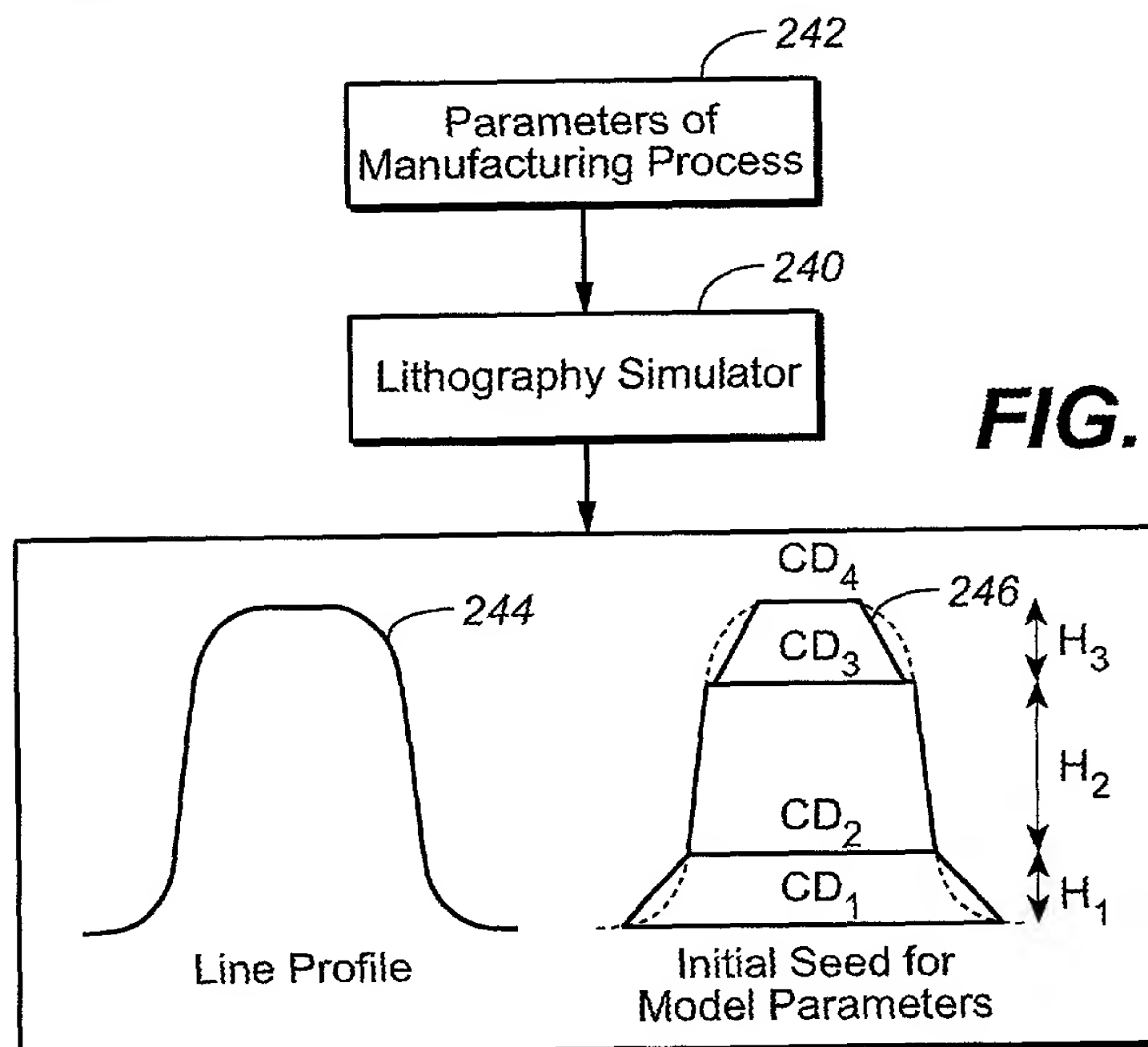
7 / 11

### Flowchart of Diffraction Solver



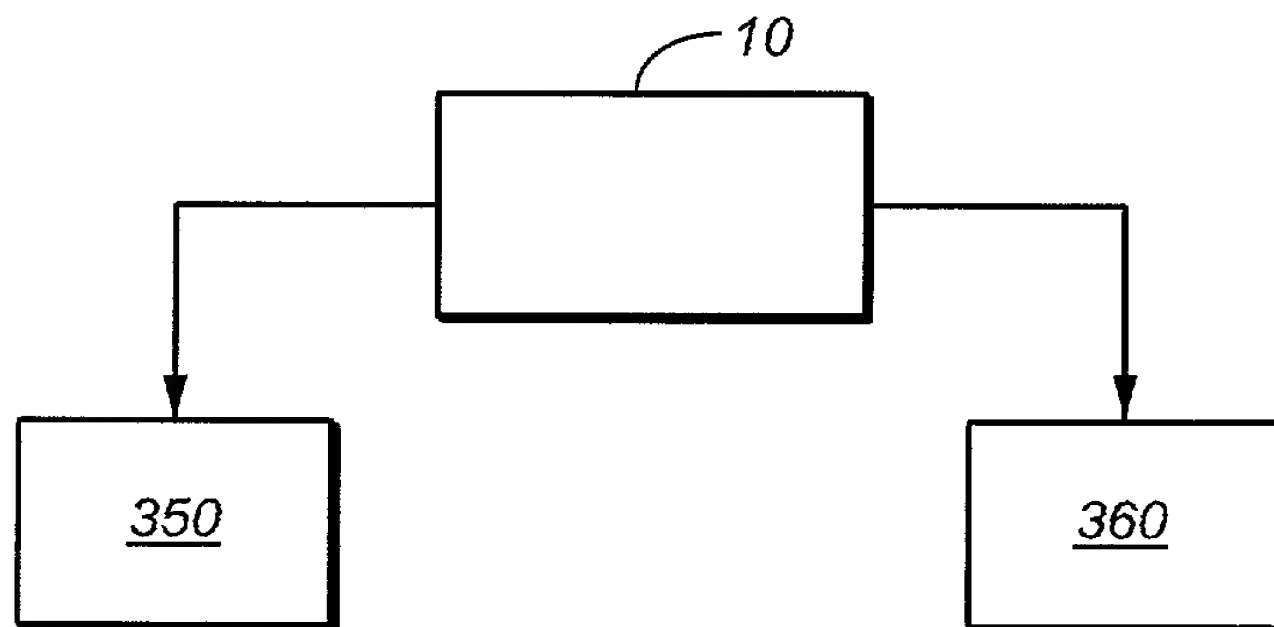
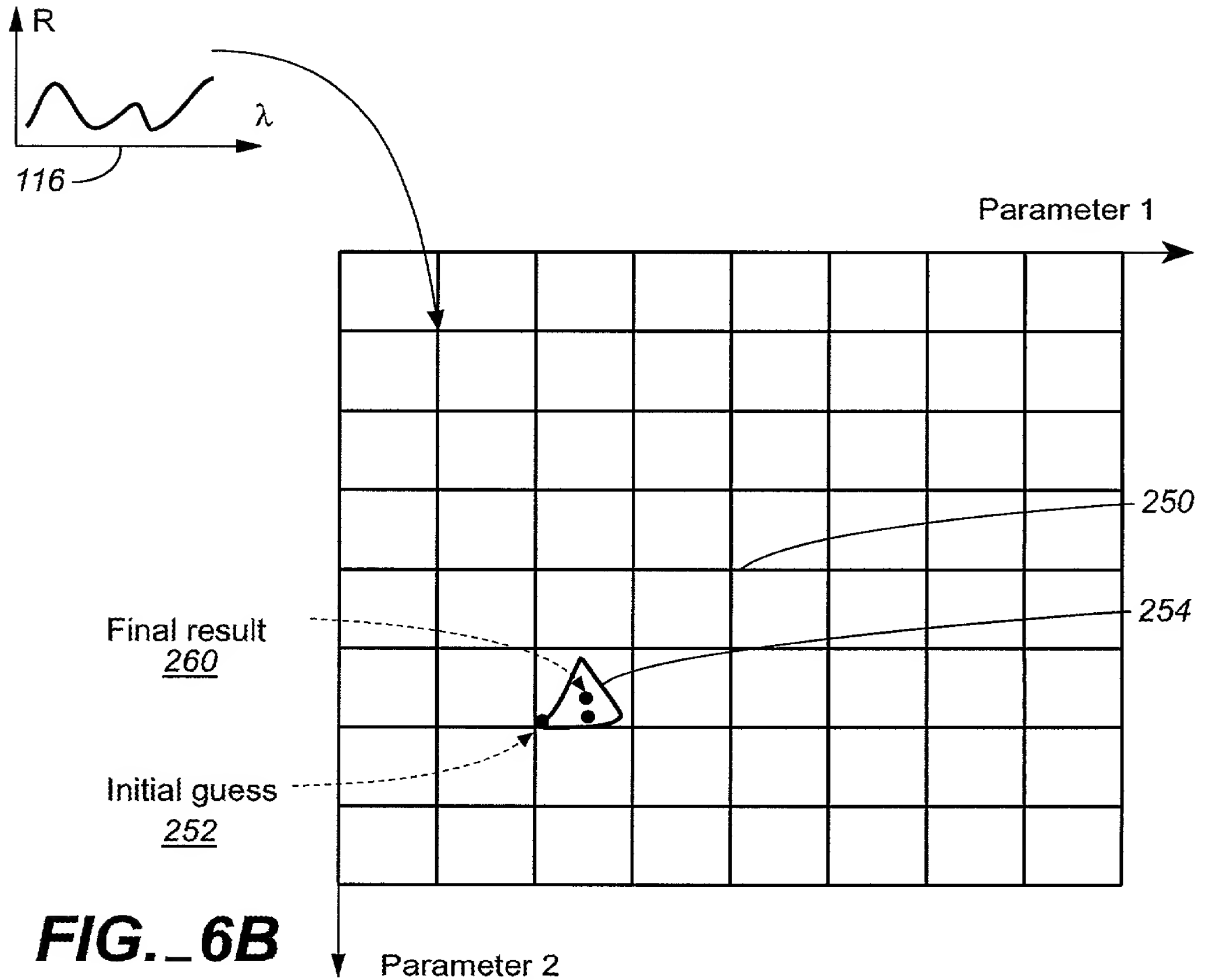
**FIG.\_5B**

### Selection of the Optimal Profile Model and Initial Seed



**FIG.\_6A**

**Selection of the Starting Point for Nonlinear  
 Optimization from the Coarse Library**





TO BE PRINTED

Selection of the Optimal Signal for Matching

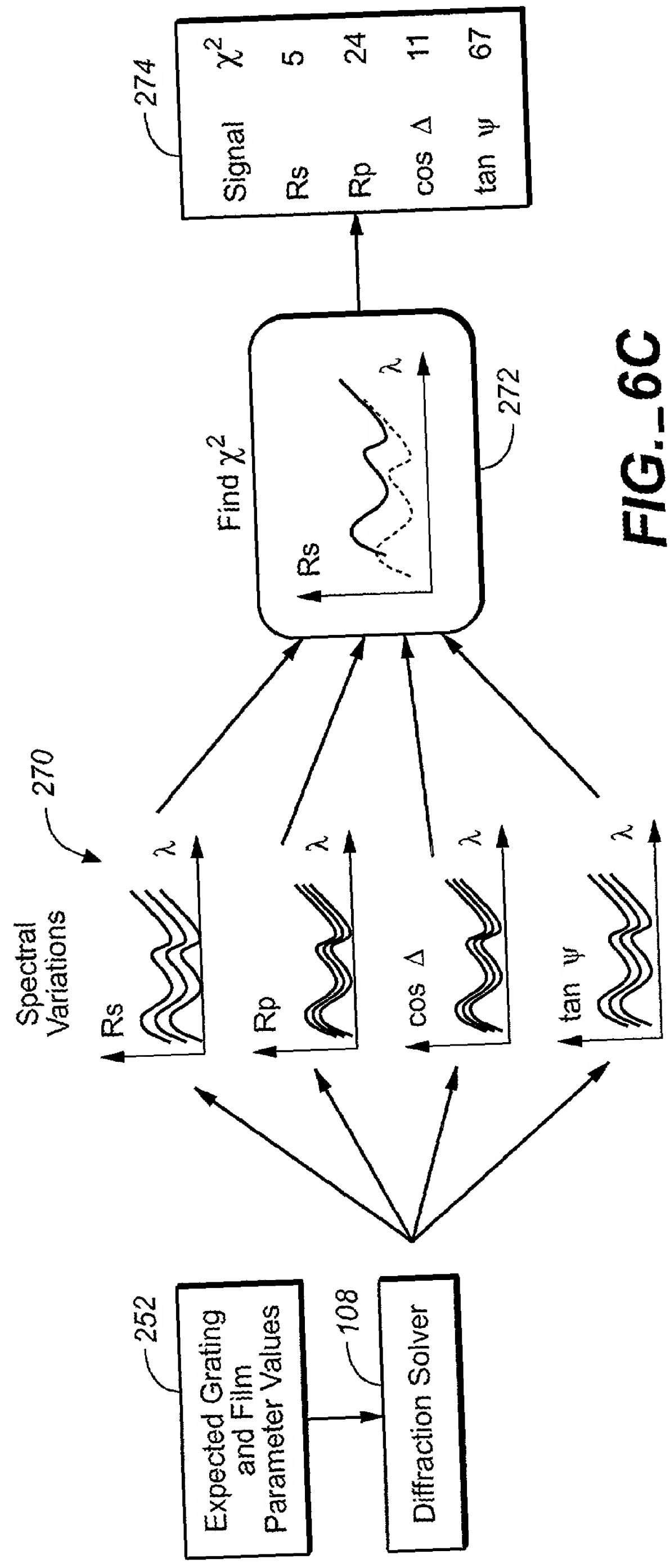
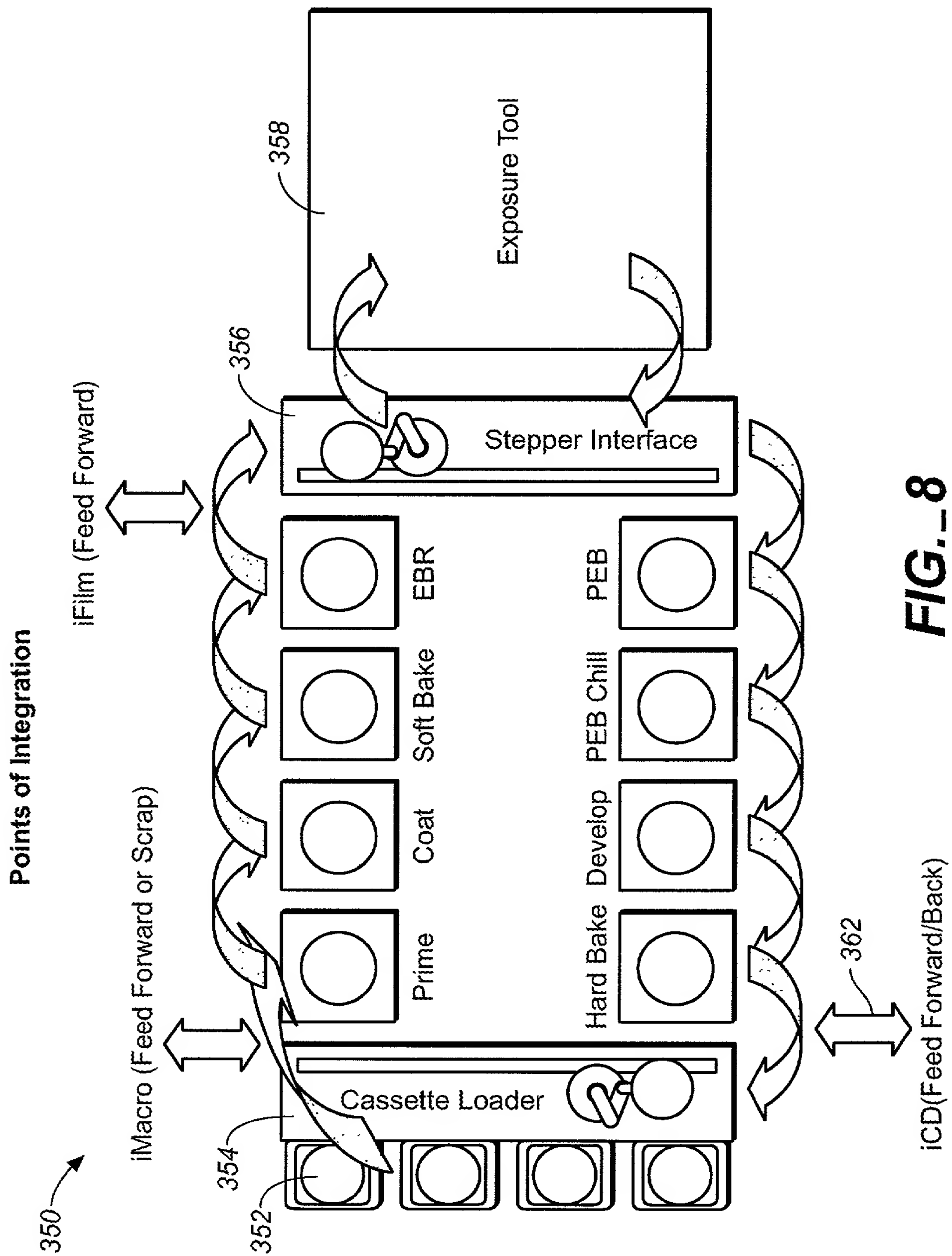
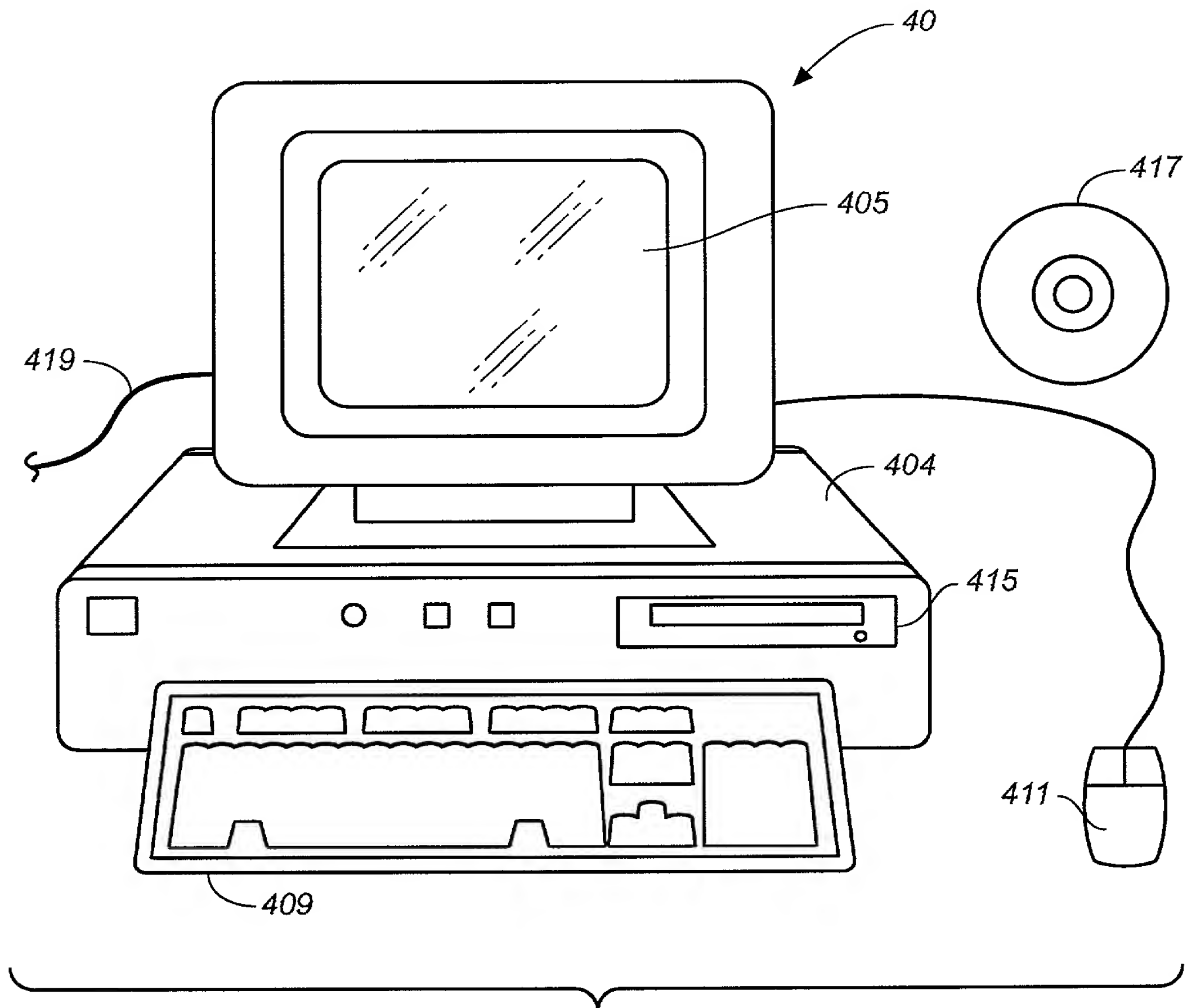


FIG. 6C





**FIG. 9**